JBIS Journal of the British Interplanetary Society

VOLUME 61 2008

Issue No:	*Themes*
1	General Papers
2	General Papers Soviet Space
3	General Papers European Space
4	General Papers
5	Future Orbital Habitats
6	General Papers
7	General Papers
8	Fifth IAA Symposium on Realistic Near-term Advanced Scientific Space Missions
9	Warp Drive, Faster than Light: Breaking the Interstellar Distance Barrier Fifth IAA Symposium on Realistic Near-term Advanced Scientific Space Missions
10	General Papers UK Space Activities Next Steps for Space Infrastructure
11	General Papers Fifth IAA Symposium on Realistic Near-term Advanced Scientific Space Missions
12	General Papers

* * *

AUTHOR INDEX

Ahn J. *et al*	An Optimization Framework for Global Planetary Surface Exploration Campaigns	487
Al-Khodari S.B. *et al*	A 3-Axis Satellite Attitude Control using CATCS	452
Baxter S.	SETI before Marconi: Sunlight Beacons and the Fermi Paradox	440
Beech M.	Terraformed Exoplanets and SETI	42
Bernasconi M.C. *et al*	Auxiliary Internal Structures (AUXIS) for an Expandable Habitat: Configuration Aspects and Hierarchical	158
Bernasconi M.C. *et al*	A Multi-Purpose Astronaut Shower for Long-Duration Microgravity Missions	172
Bernasconi M.C. *et al*	Crew Health Support on Long-Duration Missions in Microgravity: Some Considerations	186
Capó-Lugo P.A. *et al*	Nonlinear Discrete Controls for the Reconfiguration Procedure of the Tetrahedron Constellation	234
Carpinteri A. *et al*	Bio-Inspired Hierarchical Nanomaterials for Space Applications	290
Ćirković M.M.	Against the Empire	246
Cockell C.S.	An Essay on Extraterrestrial Liberty	255
Collinson G. *et al*	Planetary Penetrators: The Vanguard for the Future Exploration of the Solar System	198
DeBiase R.L.	Effects of Collisions Upon a Partial Dyson Sphere	386
Fearn D.G.	Technologies to Enable Near-Term Interstellar Precursor Missions; Is 400 AU Accessible?	279
Ferraiuolo M. *et al*	Contact Sensitivity Analysis of a Coupling Pin for the Nose Cap of a Launch Re-Entry Vehicle	14
Ferraiuolo M. *et al*	A Fast Procedure for Optimizing Thermal Protection Systems of Re-Entry Vehicles	478
Garattini R.	Casimir Energy: A Fuel for Traversable Wormholes	370
Gardiner J.	Warp Drive: From Imagination to Reality	353
Genta G.	Robotic Platforms for the Exploration of Outer Solar System Bodies	304
Gil-Fernández J. *et al*	Optimization and Guidance of Very Low-Thrust Transfers to Geostationary Orbit	139
Glasse A.C.H. *et al*	The British Contribution to JWST-MIRI	401
Grover D. *et al*	Development of On-Orbit Servicing Concepts, Technology Options and Roadmap (Part I): Commercial Aspects	203
Harvey B.	Mapping the Moon, Venus and Mars: The Soviet Lunar and Planetary Photographic and Map Archive	63
Hempsell M.	The Impact of Radiation Protection on the Design of Space Habitats	146
Hempsell M.	A Technical Description of the Habitation Extension Module	419
Hempsell M.	The use of Multi-Role Components in a Systems of Systems Infrastructure	444
Huedner L.D. *et al*	Status, Plans and Initial Results for Ares I Crew Launch Vehicle Aerodynamics	128
Janhunen P.	The Electrical Sail – A New Problem Method which may Enable Fast Missions to the Outer Solar System	322
Johnson L. *et al*	NASA's Discovery Program: Moving Toward the Edge (of the Solar System)	300
K.F. Long	The Status of the Warp Drive	347
Kezerashvili R. Ya. *et al*	Solar Radiation and the Beryllium Hollow-Body Sail: 2. Diffusion, Recombination and Erosion Processes	47
Kezerashvili R. Ya	Solar Sail Interstellar Travel: 1. Thickness of Solar Sail Films	430
Lorenz R.D.	A Review of Balloon Concepts for Titan	2
Lorenz R.D.	Titan Bumblebee: A 1 kg Lander-Launched UAV Concept	118
Maccone C.	"FOCAL" Probe to 550 to 1000 AU: A Status Review	310
Maccone C.	Computer Tensor Codes to Design the Warp Drive	358
Malatesta M. *et al*	Hibernation as a Far-Reaching Programme for Cell Nucleus Activity Modulation	339
Matloff G. *et al*	Interstellar Solar Sailing: A Figure of Merit for Monolayer Sail	330
McCulloch M.E.	Can the Flyby Anomalies be Explained by a Modification of Inertia?	373
McKenzie D.J. *et al*	Modelling of Tethered Space-Web Structures	24
Mengali G. *et al*	Considerations of Electric Sailcraft Trajectory Design	326
Menon C. et al	Biomimetic Approach to Advanced Space Missions	334
Milligan D. *et al*	Flying SMART-1 to the Moon with Electric Propulsion	466
Minami Y.	Preliminary Theoretical Considerations for Getting Thrust via Squeezed Vacuum	315
Munzenmayer R. *et al*	Future Geostationary Earth Observation Systems	78
Musha T.	Explanation of Dynamical Biefeld-Brown Effect from the Standpoint of ZPF Field	379
Obousy R.K. *et al*	Warp Drive: A New Approach	364
Pugsley D.	The Recognition of Extraterrestrial Intelligence: Are Humans up to it?	20
Radice G. *et al*	Activities of the Space Advanced Research Team at the University of Glasgow	404
Saaj C.M. *et al*	The Science and Technology Behind Galileo – Europe's GPS	91
Smith R.	Fuel Costs, Propulsion Systems and Interplanetary Supply Chains	125
Somma R.	Some Recent Results from the Cassini Titan Radar Mapper	295
Taylor N.V.	A Note on Rocket Performance Comparison Through Impulse and Thrust Coefficients	58
Ulivi P.	Europe's "Arrows to the Sun" – Two Gravity and Solar Probe Proposals from ESRO and ESA	98
Ulrich S. *et al*	Development of On-Orbit Servicing Concepts, Technology Options and Roadmap (Part II): Technical Design	213

AUTHOR INDEX - Contd

Uva B. et al	Gravity Vector Changes Induce Alterations in Nervous and Testicular Cells in Cultures and in Testis Slices	458
Varvill R. *et al*	The SKYLON Spaceplane: Progress to Realisation	412
Vulpetti G. *et al*	Preliminary Investigation on Carbon Nanotube Membranes for Photon Solar Sails	284
Weeden C. *et al*	Development of On-Orbit Servicing Concepts, Technology Options and Roadmap (Part III): Policy Considerations	224
Xu Y.	3D Range Maximization of a Suborbital Launch Vehicle's Upper Stage	395
Yemets V.	Launch Vehicle with Combustible Polyethylene Case Gasification Chamber Design Basis	32

SUBJECT INDEX

Aerodynamics 128
Ares 1 (CLV) 128
Asteroids
  missions 300,404
Astronomy
  JWST 401
Attitude control 452
Avionics 444
Balloon 2
Biefeld-Brown effect 379
Biomimetics 334
CACTS 452
Carbon nanotubes 284
Cassini 295
Clarke, Arthur C. 39
Colombo, Giuseppe 98
Communication satellites
  servicing 203
Dawn 300
Discovery programme 300
Dyson sphere 386
Earth
  observation 78
Economics 125,203
Edgeworth-Kuiper belt 304
Electric propulsion 279,466
Europe
  space missions 78,91,98,466
Extra-terrestrial civilisation 246,255
Extra-terrestrial life 20,246,300
Fermi paradox 246,440
Fly-by anomalies 373
Formation flying 234,404
Galileo (navsat) 91
GIOVE A 91
GMES 78
Guidance and control 139,234, 395,452
Habitation Extension Module 419
Heat exchangers 412
Hibernation 339
History 63,98
Impact hazard 386,404
Infrastructure
  biomimetic 334
  interplanetary logistics 125
  multi-role components 444
  requirements 125,146
Interstellar colonisation 246
Interstellar propulsion 315,347,353, 358,364,370,430
Interstellar travel 279
James Webb Space Telescope 401
JWST 401
Kepler 300
Kuiper belt 304
Launch vehicles
  aerodynamics 128
  combustible case 32
  Skylon 412
  sub-orbital 395
  reusable 412
Life sciences
  hibernation 339
  station crew health 186
  testicular cells 458
Manned spaceflight
  hibernation 339
  launch vehicles 128
  physiology 458
  radiation shielding 146
  space habitat 158,172,186,419
Mars
  history of missions 63
  mapping 63
  settlements 255
  surface exploration 487
Meteosat 78
Mission design 487
Moon
  mapping 63
  penetrator probe 198
  SMART 1 466
MoonLITE 198
Nano-materials 284,290
Navigation 91
Orbital mechanics
139,234,326,373,404,466
Philosophy 255
Planets
  extrasolar 43
  Mars 63
  penetrator probe 198
  robotic exploration 2,118
  Venus 63
Policy
  satellite standardisation 224
Propulsion methods
  atmospheric 412
  electric 279,466
  electric sail 322,326
  electromagnetic 379
  interstellar 315,330,347,353, 358,364,370
  low thrust 139
  rocket case 32
  rocket nozzles 58
  rocket performance 58
  Solar sail 47,284,330,430
  squeezed vacuum 315
  warp drive 347,353,358,364
  wormhole 370
Radiation shielding 146
Re-entry vehicle 14,478
Relativity 98,310,315,347,353, 358,364,370,373
Robotics 24,213,304
Rocket
  combustible case 32
  performance accounting 58
RTG power system 2
SABRE 412
Satellites
  Earth observation 78
  navigation 91
  servicing 203,213,224
SETI
  beacons 440
  Dyson sphere 386
  Fermi paradox 246,440
  methods 20
  planetary engineering 43
  targets 20
Skylon 412
SMART 1 466
Solar sail 47,284,322,326,330,430
Space habitat 158
Space probes 98,198,279,295, 300,304,310,466
Space station
  crew health 186
  hygiene 172
  ISS 419
  shower unit 172
Space webs 24
Structures
  coupling pin 14
  inflatable 158
  nano-materials 284,290
  thermal protection 478
  webs 24
Sun
  gravitational lens 310

SUBJECT INDEX - Contd

Terraforming 43
Testicular cells 458
Thermal control 452
Thermal protection 478
Titan
  balloon 2
  Cassini 295
  UAV 118
United Kingdom
  HEM 419
  JWST 401
  Skylon 412
  University of Glasgow 404
Unmanned Air Vehicle 118
USSR
  planetary mapping 63
Venus
  mapping 63
Waine, Eric M. 114

* * *